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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,253	04/13/2001	Christopher J. Moulis	113748-5760US	5020

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EXAMINER

SELLERS, DANIEL R

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,253

Applicant(s)

MOULIOS, CHRISTOPHER J.

Examiner

Daniel R. Sellers

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed March 21, 2006 with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. **Claims 1-18 and 21** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Marx, U.S. Pat. No. 6,175,632.
4. Regarding **claim 1**, Marx teaches a method of determining a period of recurring events within a recorded signal, wherein the period provides a measurement of a tempo of the recorded signal (Col. 9, lines 11-31). The determination comprises establishing

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an anchor point, which is a point indicative of a beginning point for a period of recurring events (Col. 10, lines 44-52), wherein a length is determined to define a first loop (Col. 9, lines 29-31), and refining the length of the first loop by comparison with subsequent loops (Col. 9, lines 32-39 and Col. 11, lines 34-44).

5. Regarding **claim 2**, the further limitation of claim 1, Marx teaches a system that determines a tempo of a music signal, wherein it is determining if the recorded signal is rhythmic.

6. Regarding **claim 3**, the further limitation of claim 1, Marx teaches a system that uses digital signal processing (DSP) techniques to identify where the recurring events begin (Col. 6, lines 29-35).

7. Regarding **claim 4**, the further limitation of claim 1, Marx teaches a system that receives an indication of anchor point location from a computer input device (Col. 15, lines 46-55).

8. Regarding **claim 5**, the further limitation of claim 1, see the preceding argument with respect to claim 1 and 3. Marx teaches a system that uses DSP techniques to determine the length of the period.

9. Regarding **claim 6**, the further limitation of claim 5, see the preceding argument with respect to claim 1 and 3. Marx teaches a system that uses DSP techniques to compare the first loop to subsequent loops.

10. Regarding **claim 7**, the further limitation of claim 1, Marx teaches that determining a length of the period is received from a computer input device (Col. 16, lines 6-14).

11. Regarding **claim 8**, the further limitation of claim 1, see the preceding argument with respect to claim 1 and 3. Marx teaches that the comparison of the first loop with subsequent loops utilizes DSP techniques.

12. Regarding **claim 9**, the further limitation of claim 8, see the preceding argument with respect to claim 1. It is implicit that the first loop starts at a first inspection point and ends at a first distance from the first inspection point, and the subsequent loop starts at a second inspection point and ends at a second distance from the second inspection point.

13. Regarding **claim 10**, the further limitation of claim 1, Marx teaches that the refining of the length of the period comprises using distances between multiple anchor points (Col. 10, lines 44-52 and lines 64-65).

14. Regarding **claim 11**, see the preceding argument with respect to claim 1. Marx teaches these features.

15. Regarding **claim 12**, the further limitation of claim 11, see the above rejections of claims 1 and 6. Marx teaches the adjusting of lengths.

16. Regarding **claim 13**, the further limitation of claim 11, see the above rejection of claim 1. Marx teaches a system that provides a means for identifying where recurring events begin.

17. Regarding **claim 14**, the further limitation of claim 11, see the above rejection of claim 4. Marx teaches these features.

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18. Regarding **claim 15**, the further limitation of claim 11, see the above rejections of claims 1, 6, and 9. Marx teaches a system that searches for repetitive loops in an audio file.

19. Regarding **claim 16**, the further limitation of claim 11, Marx teaches means for combining the recorded signal with a known tempo with another signal with an unknown tempo (Col. 20, lines 1-12).

20. Regarding **claim 17**, the further limitation of claim 11, Marx teaches means for presenting the recorded signal and the loops in the signal (Col. 14, lines 17-32).

21. Regarding **claim 18**, see the above rejection of claim 1. Marx teaches a system with these features.

22. Regarding **claim 21**, see the preceding argument with respect to claim 1. Marx teaches these features and the features of using the tempo information to process the recorded audio signal with a second audio signal (Col. 3, lines 45-49).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. **Claims 19 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marx as applied to claim 18 above, and further in view of Kraft (previously cited).

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25. Regarding **claim 19**, the further limitation of claim 18, Marx teaches the features of the parent claim. However, Marx does not teach a presentation device with a graphical user interface. Kraft teaches a system that analyzes input audio signals and converts them to human readable notation (Col. 5, lines 16-35). Kraft teaches the use of various other programs, which can display portions of an audio signal in a graphical user interface. It is inherent that Kraft's system can provide portions of an audio signal in a graphical user interface. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Marx and Kraft for the purpose of creating a score from an input music file with accurate tempo information.

26. Regarding **claim 20**, the further limitation of claim 17, see Kraft

... further comprising an interface device configured to connect the CPU with a network of computers.
(Col. 14, lines 3-9).

Kraft teaches a system that can be distributed for use through a network of computers. It is inherent that not only the system can be distributed for use, but that the interface of one computer in a network can manipulate data from another computer in the same network.

Conclusion

27. The applicant is reminded that Technology Center 2600 has undergone restructuring as of March 19, 2006. Any **further communication** regarding this application should **indicate the new Art Unit 2615** (old art unit 2644).

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Herberger et al., U.S. Pat. No. 6,518,492.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SINH TRAN
SUPERVISORY PATENT EXAMINER

DRS